

# Annealing Glass Beads

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## Important Safety Rules

An electric kiln is extremely safe to operate provided you follow these basic safety rules:

- Unplug kiln when not in use.
- Do not touch hot sides.
- Keep unsupervised children away.
- Place kiln (and the stand furnished with kiln, if any) on a non-combustible surface.
- Do not install closer than 12" from any wall or combustible surface.
- Fire only in a well ventilated, covered and protected area.
- Keep cordset away from hot sides of kiln.
- **DANGEROUS VOLTAGE:** Do not touch heating elements with anything.
- Disconnect kiln before servicing.
- Do not leave kiln unattended while firing.
- Wear safety glasses when cutting glass.
- Wear firing safety glasses when looking into a hot kiln.
- Keep food away from your work area.
- Never fire tempered glass inside a kiln. It could explode.
- Avoid firing toxic materials inside the kiln, such as styrofoam (used as a core for silver clay hollow beads).

## Annealing Flame-Worked Glass Beads

Glass is sensitive to breakage as it cools through the annealing range. This is approximately 950°F/510°C through 700°F/371°C. The larger the piece, the slower it must cool.

To safely cool flame-worked glass beads, anneal them in your kiln using the bead door.

## Digital Kilns

Program the controller in Ramp-Hold for the following two segments. (See the separate digital controller manual.) If your bead-making session will be longer than three hours, program a longer hold time in segment 1.

Segment	Rate	Temp.	Hold
1	1799°F/999°C	1000°F/537°C	03.00
2	400/222	700/371	00.00

Fire the kiln. When it reaches 1000°F/537°C, it will maintain that temperature for three hours.

## Manual Kilns

Fire the kiln with the switch on High. At 900°F/482°C, lower the switch setting to Med. Then keep adjusting the switch to maintain a temperature of 1000°F/537°C.

## Annealing the Beads

**1** At 1000°F/537°C, the kiln is ready to receive the bead mandrels loaded with hot beads. Allow a freshly finished bead to cool slightly before inserting. This is to prevent the bead from flattening on one side when it is placed inside the kiln.

Open the bead door. Insert the mandrels as you complete the beads. Leave the door ajar with the end of the bead mandrel extending outside the kiln.

**2** Digital Kilns: When you have finished the batch of beads, perform a Skip Segment. This will end the temperature hold and begin segment 2. The kiln will slowly cool through the annealing range. Manual Kilns: Turn the kiln off and let it cool. To slow down the cooling, turn the switch to Low.

After the kiln shuts off, leave the beads in place. Do not remove them until the kiln has reached room temperature.